--17.(New) A sorbent according to claim 15, characterized in that the zwitterionic non-aromatic groups have been bound to the carrier by polymerizing, preferably graft polymerizing, monomers comprising non-aromatic zwitterionic groups on the surface of the carrier.--

--18.(New) A sorbent according to claim 17, characterized in that the zwitterionic non-aromatic groups have been incorporated throughout the structure of the carrier sorbent by polymerizing monomers comprising non-aromatic zwitterionic groups together with suitable divinyl crosslinking monomers.--

--19.(New) A sorbent according to claim 15, characterized in that the zwitterionic non-aromatic groups have been bound to the carrier by activation of the carrier with an alkylating functional group, which is subseqently reacted with an ω-dialkylamino-alkylsulfonic acid to form non-aromatic zwitterionic groups on the carrier.--

--20.(New) A sorbent carrier according to claim 15, characterized in that the surface of the organic resin has been activated by incorporation of a reactive functional group such as epoxy, or halogenoalkyl, such as choroalkyl or bromoalkyl and that is capable of alkylating the amino group of an amionoalkylsulonic acid in a reaction producing covalently bonded zwitterionic non-aromatic groups on the sorbent carrier.--

--21.(New) A sorbent carrier according to claim 15, characterized in that the surface of the organic resin has been activated by incorporation of a reactive functional group such as hydroxyalkyl, carboxylic acid, carboxylic acid chloride, carboxylic acid bromide, carboxylic anhydride, carboxylic ester, alkyl oxonium, epoxy, chloroalkyl, bromoalkyl, diazoalkyl, or activated amide such as a carboxylic imidazolide or triazolide, that is capable of forming an ester or ether bond with a hydroxyl group residing on the alkyl chain interconnecting the quarternary ammonium group and the sulfonate group in a sulfobetaine zwitterion, thus covalently binding a non-aromatic zwitterionic group to the surface of the activated sorbent carrier in a lateral fashion.--

--22.(New) A sorbent carrier according to claim 15, characterized in that the carrier is a polymeric monolith.--

--23.(New) A sorbent carrier according to claim 15, characterized in that the zwitterionic groups are ω-sulfoalkyl-trialkylammonio (sulfobetaine) groups.--

--24.(New) A method for purifying a particular biological macromolecule such as a protein or a nucleic acid by zwitterionic ion exchange chromatography, comprising the steps of

a) determining the approximative net charge of the biological macromolecule in aqueous solution as a function of pH of said solution;

b) using the information obtained in step a) for choosing a pH and an ionic strength at which the macromolecule obtains a suitably strong interaction with a zwitterionic ion exchange column;

c) using the information obtained in step b) for choosing a pH and an ionic strength at which the macromolecule is eluted;

d) applying a solution containing said biological macromolecule to a column comprising zwitterionic sorbent carriers, said solution having a pH and an ionic strength that have been chosen in step b);

e) eluting the column in step d) with an elution solution whose pH and ionic strength have been chosen in step c); and

f) recovering said biological macromolecule, characterized in that the column contains, sorbent carriers comprising zwitterionic non-aromatic groups according to claim 15.--

--25.(New) A method according to claim 24, characterized in that the maximal ionic strength used is 0.25 M.--